

Amendments to the Claims

1. (Currently amended) A production method of biodegradable plastic comprising:

providing lactic acid as a raw material;

subjecting the lactic acid to condensation polymerization by dehydration under high temperature and reduced pressure in the presence of a combination of zinc chloride and stannous chloride wherein the amount of the zinc chloride is from 0.1 to 0.3% by weight and the amount of the stannous chloride is from 0.1 to 1% by weight; and

obtaining polylactic acid that is a main component of the biodegradable plastic.

2. (Currently amended) A production method of biodegradable plastic comprising:

providing lactic acid as a raw material;

subjecting the lactic acid to condensation polymerization by dehydration under high temperature and reduced pressure in the presence of a combination of zinc chloride and stannous chloride wherein the amount of the zinc chloride is from 0.1 to 0.3% by weight and the amount of the stannous chloride is from 0.1 to 1% by weight;

releasing water vapor generated during the condensation polymerization by dehydration to the outside of the system;

determining the end point of the reaction by measuring the released amount of the water vapor concurrently with the release thereof; and

obtaining polylactic acid that is a main component of the biodegradable plastic.

3-4. (Cancelled)

5. (Original) The production method of biodegradable plastic according to claim 1 or 2, wherein the temperature of the condensation polymerization by dehydration is from 180 to 220°C and the degree of vacuum at the time of the condensation polymerization by dehydration is from -0.05 to -0.08 Mpa.

6-7. (Cancelled)

8. (Withdrawn) A single shaft apparatus for producing biodegradable plastic, comprising:

- an airtight container having a vertical axis,
- said airtight container comprising a lower main body and an upper cover body,
- a vertical shaft disposed through the center of said airtight container along the vertical axis of the airtight container, said shaft including a mixing blade, said shaft having an upper end extending outside of said airtight container operably connected to a motor, said shaft having a lower end comprising a screw shaft,
- a heating element disposed on an outside surface of said lower main body of said airtight container,
- said airtight container being provided with an inlet on said upper cover body for introducing lactic acid or catalyst into said airtight container,
- said airtight container being provided with a product outlet on said lower main body for discharging polylactic acid,
- said airtight container being provided with a vent on said upper cover body for venting water vapor,
- said vent being operably connected to a device for sensing water vapor, a device for measuring water vapor, and a pressure reducing unit to reduce pressure inside said airtight container.